

SEQUENCE LISTING

- <110> Ben-Bassat, Arie
Cattermole, Monica
Gatenby, Anthony A.
Gibson, Katherine J.
Ramos-Gonzalez, Isabel
Ramos, Juan
Sariaslani, Sima
- <120> Method for the Production of p-Hydroxybenzoate in Species of
Pseudomonas and Agrobacterium
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Glu	Phe	Glu	Lys	His	Gly	Tyr	Ala	Val	Tyr	Arg	Val	Asn	Thr	Ala	Phe		
		465			470					475					480		
Gln	Glu	Arg	Val	Ala	Gln	Arg	Tyr	Gly	Thr	Val	Lys	Arg	Arg	Trp	Asn		
				485					490						495		

Thr Pro Ser Ser Ala Pro Trp Thr Arg Thr Thr Ser Trp His Pro Ala
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Asn Pro Ala Ser Thr Ser Pro Thr Ser Ser Asn Pro Lys Gln Asp Pro
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Ala Gly
 530

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<210> 23
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 <210> 30
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 <220>
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 <400> 32
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 <210> 33
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 <220>
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 <400> 33
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 <210> 34
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 <210> 35
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 <210> 37
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 <400> 37
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 <210> 38
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 <210> 43
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 <210> 47
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 <210> 51
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 <400> 52
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<210> 56
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<210> 57
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 <210> 58
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 <400> 58
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 <400> 63
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 <210> 67
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 <400> 68
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 <400> 69
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<210> 70
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<400> 71
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<400> 72
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<210> 73
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 <210> 82
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<210> 83
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<400> 83
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<210> 89
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<210> 90
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gaggtagaaa gatgataaaa atgaaaattg ccagcgctact cgtaactgctt ttgagcgggt 240
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<211> 456
<212> PRT
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Gly Ala Ile Ser Arg Ala Met Gly Gly Thr Ser Ser Ser Tyr Tyr Thr
      35             40             45

Gly Asn Ala Ala Leu Ile Ser Asn Pro Ala Thr Leu Ser Leu Ala Pro
      50             55             60

Asp Gly Ser Gln Phe Glu Leu Gly Pro Asp Ile Val Ser Thr Asp Ile
      65             70             75             80

Glu Val Arg Asp Ser Ser Gly Ala Lys Val Lys Ser Ser Thr Glu Ser
      85             90             95

Asn Asn Arg Gly Pro Tyr Ile Gly Pro Gln Leu Ser Tyr Val Thr Gln
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Leu Asp Asp Trp Arg Phe Gly Ala Gly Leu Phe Val Ser Ser Gly Leu
      115            120            125

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 145 150 155 160
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 165 170 175
 Ser Ala Asp Leu Val Trp Thr Ser Leu Asn Leu Glu Leu Leu Leu Pro
 180 185 190
 Ser Ser Gln Val Gly Ala Leu Ala Ala Gln Gly Asn Leu Ser Gly Asp
 195 200 205
 Leu Val Ala Pro Leu Ala Gly Phe Val Gly Ala Gly Gly Ala Ala His
 210 215 220
 Phe Ser Leu Ser Arg Asn Asn Pro Val Gly Gly Ala Val Asp Ala Ile
 225 230 235 240
 Gly Trp Gly Gly Arg Leu Gly Leu Thr Tyr Lys Leu Thr Asp Lys Thr
 245 250 255
 Val Leu Gly Ala Met Tyr Asn Phe Lys Thr Ser Val Gly Asp Leu Glu
 260 265 270
 Gly Thr Ala Thr Leu Ser Ala Ile Ser Gly Asp Gly Ala Val Leu Pro
 275 280 285
 Leu His Gly Asp Ile Arg Val Lys Asp Phe Glu Met Pro Ala Ser Leu
 290 295 300
 Thr Phe Gly Phe Ala His Gln Phe Asn Glu Arg Trp Leu Val Ala Ala
 305 310 315 320
 Asp Val Lys Arg Val Tyr Trp Ser Asp Val Met Glu Asp Ile Ser Val
 325 330 335
 Asp Phe Lys Ser Gln Ser Gly Gly Ile Asp Ile Glu Leu Pro His Asn
 340 345 350
 Tyr Gln Asp Ile Thr Val Ala Ser Ile Gly Thr Ala Tyr Arg Val Asn
 355 360 365
 Asp Lys Leu Thr Leu Arg Ala Gly Tyr Ser Tyr Ala Gln Gln Ala Leu
 370 375 380
 Asp Ser Arg Leu Ile Leu Pro Val Ile Pro Ala Tyr Leu Lys Lys His
 385 390 395 400
 Val Ser Leu Gly Ser Asp Tyr Ser Phe Asp Lys Lys Ser Lys Leu Asn
 405 410 415
 Leu Ala Ile Ser Phe Gly Leu Lys Glu Ser Leu Asn Thr Pro Ser Tyr
 420 425 430
 Leu Ser Gly Thr Glu Thr Leu Lys Gln Ser His Ser Gln Ile Asn Ala
 435 440 445

Val Val Ser Tyr Ser Lys Ser Phe
450 455

<210> 93
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for cloning pcu for insertion into pMC3

<400> 93
gatgatgaag cttccccacc aaaccc 26

<210> 94
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for cloning pcu for insertion into pMC3

<400> 94
tcatagatca agcttttccc agtcacgacg 30

<210> 95
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for construction plasmids pPCUR1 and pPCUR2

<400> 95
ggggatcctc accgccggct caagg 25

<210> 96
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: primer

<220>
<223> primer used for constructing plasmids pPCUR1 and pPCUR2

<400> 96
gcgggtggga tccatgggtt ctctc 25

<210> 97
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer used to map the transcript initiation site of tmoX

<400> 97
 cggtacttac tatatccggc ccg

23

<210> 98
 <211> 1836
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 98
 tcaactcccc ttgagccggt agctgatctg cgcgcgactc atgcccaca tctgcgcgcg 60
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 cttcagtgat gtgcctagta cccggtcgcg cccggcgagg aaggcctgca ggttggccag 180
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 ggtctccgcc agttgctcgg ccgagggcag cccgctgctg ccgaactggt tggcctggtc 1740
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 gccgggattg ctcgagggtt tgcgagtcac ggtcat 1836

<210> 99
 <211> 1476
 <212> DNA
 <213> Pseudomonas mendocina KR-1

<400> 99
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ttgcgcacatcg ccctggccag ccgcgaagac ctgcacgcag cctaccgcaa ggcccgcgac 180
agccagcggg agtgggagcag cacggcgccg gccgagcgcg cccgggtgct gctggaagcg 240
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accctgcaac acagcccgcg gccctatccg ttctga 1476

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<210> 100
 <211> 336
 <212> DNA
 <213> *Pseudomonas mendocina* KR-1

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<400> 100
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attttcgccc tgctcgccg ccaggccttc gccgacggcg acggcgtctg gaaaggcg 120
gagaacgtct accagaaaat ctgtggccac tgccacgaaa aacagggtgg cccgtgatc 180
accggcgccc agctaccgcc gcagtacatc agtgccgtgg tcgcaacgg cttccgcgcc 240
atgccggcct ttccggcctc gttcatcgac gacaaggccc tgcagcaggt cgccgagtag 300
atctccaaga cccctgctac tgtggccaag ccctga 336

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<210> 101
 <211> 684
 <212> DNA
 <213> *Pseudomonas mendocina* KR-1

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<400> 101
atgaacatcg aacgtcgtac cctgctcaag ggcatggccc tggcgggcct ggctggcgcc 60
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ctgcccaccc tgcctcgtgt agatggcgag gccggcggag cggccttcct cgccggagtc 180
ggttccagcc cggcgggcag caaggccgag gtgcagcgca ccgatctcgg cctggacttc 240
gtcttggggc tggagaagcg cctgcgcagt ggtcagcagc aacgcatcat cggctcgtg 300
gatgacgcca gcgcgctct gatcctcgac ctggcccgcg gcagcggcgc gcgggtgcag 360
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gatgacagca gtgcggcccc acgcattgcc aaccattacc cggcgcttac cggccaatto 660
gtttcggtct cgatcctggt ttga 684

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<210> 102
 <211> 1593
 <212> DNA
 <213> *Pseudomonas mendocina* KR-1

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<400> 102
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caactcatcc cctacaacaa gatcatgata gcagtggaca acgcgaaca cgcgccctcc 180
gctgctgtca ccgccaccac tgtggaacag gtgcagggcg tggatgaagat ctgcaacgaa 240
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ggcccgctgg gcaacacccat ggaccgtggc gtgggctaca cccctacgg cgagcacttc 540
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gcgccctgga cccgaacaac atcctggcac cgggcaaatc cggcatcgac ctgcaccaac 1560
agttctaacc ctaagcaaga ccccgccggg taa
1593

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<210> 103
<211> 1371
<212> DNA
<213> Pseudomonas mendocina KR-1

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<400> 103
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ggtaccagct catcgtatta taccggcaat gctgcattga tcagcaaccc cgctacattg 180
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tttgccctaa aagagagctt gaacacacca tcatacctaa gcggcaccga aacgttgaag 1320
caaagccaca gccaaaataaa cgcagtggtt tctacagca aaagctttta a
1371

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<220>
 <223> primer

<400> 108
 ggatctcaaa gccctgacc 19

<210> 109
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer

<400> 109
 tgctgcacaa ggccggtatc g 21

<210> 110
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer

<400> 110
 ggtcatgaac cagctgaagc g 21

<210> 111
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<220>
 <223> primer

<400> 111
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<210> 112
 <211> 3554
 <212> DNA
 <213> Pseudomonas putida

<400> 112
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